steady rise set in, the winds continuing to veer without interruption, but at the same time diminishing in force, while the weather continued to improve until normal conditions were reestablished. A practically similar sequence of wind and weather may be noted for each depression shown by the curve.

For strictly accurate observations aboard ship the aneroid barometer can never take the place of the mercurial. For ordinary daily use, however, the self-registering aneroid has much to recommend it in the fact that it furnishes automatically a complete record of the changes which take place between the hours of observation, and this in the shape of a continuous curve, as shown in the diagram—a shape which is much more intelligible to the ordinary observer than a series of figures. Especially is such a record of importance in the tropics, where the only variation to which the barometric pressure is subject under normal conditions is the daily double oscillation, which by the use of the self-registering aneroid is made apparent to the eye. In these waters one of the most unfailing indications of the approach of a hurricane is the interruption of this wave-like motion in the pressure, and in the curve drawn by the self-registering aneroid such an interruption can not escape notice, while its detection in the case of a mercurial barometer demands a series of (at least) hourly readings, each of which must be corrected for temperature before tabulation.

Turning now to the ordinary aneroid, it is hard to imagine a case in which the self-registering instrument can not be substituted for it with advantage. Both instruments are, of course, liable to be disturbed by an accidental jar or shock. In such an event the index hand of the aneroid furnishes no intimation of the occurrence, whereas the self-registering instrument will reveal at a glance both the time and the extent of the disturbance. The determination of the initial error by means of comparison with a standard mercurial is also much simplified in the case of the recording instrument. The cost of the latter is but slightly greater than that of the ordinary aneroid, and the only additional trouble entailed is the weekly task of placing the paper upon the cylinder and winding the clock.

The only point upon which confusion may arise in the use of these instruments is in respect to the time. If the clock is started in accordance with San Francisco time, for example, the entire sheet will, of course, represent the local time of that port, and the successive noons and midnights will denote, respectively, noon and midnight for San Francisco. To convert the hours shown upon the barogram into ship's (local) time, a correction must therefore be applied to the indicated times, the amount of which will depend upon the longitude east or west of San Francisco, or of whatever port or longitude is represented by the sheet. A note should always be made on the sheet, stating with what local time it corresponds. The initial error of the aneroid as determined by comparison with a standard mercurial should also be stated.

NOTE BY THE EDITOR.

THE METEOROLOGICAL CENTURY.

The question as to when the nineteenth century ends has been widely discussed. It is evident that we are using the word century in two slightly different significations, viz., either as a consecutive interval of time, or as a series of isolated numbers or things. From the latter point of view we speak of the numbers 1 to 100, or 0 to 99 as a century. On this basis we have a century of poems, or men, or other integral units, and a century of years may begin and end when we will. On the other hand we may use the word century as an interval of time; thus, from the beginning of any epoch to the end of the first year is an interval of one year. In mathematical language we indicate any portion of this year by a cipher followed by a decimal point and the proper numerals. When 99.99 years have elapsed we are near the close of the first century of elapsed time. As a series of numbers 1900 is the first year of the twentieth century. As a record of elapsed time January 1, 1901 is the beginning of the twentieth century.

The Meteorological Congresses and Committees meeting at Leipsic, 1872, Vienna, 1873, Utrecht, 1874, Rome, 1879, Paris, 1885, Zurich, 1888, Munich, 1891, Paris, 1896, adopted resolutions requiring that the following system be adopted in taking averages of meteorological data.

(a) This century is to be divided into decades. The first decade begins January 1, 1801, and ends with December 31, 1810, inclusive. This may be divided up into two lustrums, beginning, respectively, January 1, 1801, and January 1, 1806.

In other words the meteorological century begins with January 1 of the year one, and ends with December 31 of the year 100, and so for each successive century.

(b) The year is to be divided into pentades of five days each, as first used by Dove. The first pentade includes the whole of January 1, 2, 3, 4, and 5. There are therefore 73 pentades in the year. When leap year occurs the pentade in which February 28 occurs is to include the 29th also, and, therefore, has six days in place of five.

(c) The day is divided into twenty-four hours, beginning and ending at midnight, mean local time. The first observation of the day is to be that taken at 12 o'clock, midnight, or 24 o'clock, midnight, if a 24-hour numeration be used. The numeration 24 m., 1 a. m., 2 a. m.————24 m. is to be preferred to the numeration 0 m., 1 a. m.————23 p. m., 0 m.; but the latter may be used in the publication of meteorological tables. The expression 12 p. m. is recommended for the midnight hour, and 12 a. m. for the midday hour in case the numeration 1^h————24^h is not used.

(d) In taking daily means of twenty-four hourly observations the formula indicated by the method of quadratures is to be followed, viz:

$$\text{Daily mean} = \frac{[\frac{1}{2}(24^h_1 + 24^h_2) + 1^h + 2^h \ldots\ldots + 23^h]}{24}$$

The first twelve hours, viz, 1 to 12 are to be considered as belonging to the morning; the following twelve, viz, 13 to 24 as belonging to the afternoon.